

In the Claims

1-13 (canceled).

14 (currently amended). An isolated polynucleotide selected from the group consisting of:

- a) a polynucleotide encoding a polypeptide comprising an amino acid sequence selected from the group consisting of:
  - i) the amino acid sequence of SEQ ID NO:2; and
  - ii) an amino acid sequence that is at least 95% identical to the amino acid sequence of SEQ ID NO:2 and binds to the polypeptide g34782 or binds to a calcium/calmodulin-dependent kinase II (CaM-KII);
- b) a polynucleotide comprising the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, or the complement thereof;
- c) a polynucleotide that: (i) encodes a polypeptide binds to the polypeptide g34782 or binds to a calcium/calmodulin-dependent kinase II (CaM-KII); and (ii) has at least 95% identity to the nucleotide sequence of SEQ ID NO: 1 or 3;
- ~~e) a polynucleotide fragment comprising nucleotide positions 1 to 140; 141 to 460, 460 to 690; or 87 to 346 of SEQ ID NO: 1 or nucleotide positions 1 to 3038; 1 to 421; 422 to 557; 2158 to 2218; or 2620 to 3039 of SEQ ID NO: 3; and~~
- d) a polynucleotide which hybridizes under stringent conditions to a polynucleotide as set forth in (a) or (b) or (c)~~comprising nucleotide positions 1 to 140; 141 to 460, 460 to 690; or 87 to 346 of SEQ ID NO: 1, said stringent conditions comprising a hybridization step at 65° C in the presence of 6 x SSC buffer, 5 x Denhardt's solution, 0.5% SDS and 100µg/ml of salmon sperm DNA followed by four washing steps comprising two washings of 5 minutes at 65°C in a 2 x SSC and 0.1% SDS buffer; one washing of 30 min at 65°C in a 2 x SSC and 0.1% SDS buffer, and one washing of 10 minutes at 65°C in a 0.1 x SSC and 0.1% SDS buffer.~~

15 (previously presented). The polynucleotide of claim 14, further comprising a label.

16 (previously presented). The polynucleotide of claim 14, wherein said polynucleotide is bound to a solid support.

17 (previously presented). A recombinant vector comprising the polynucleotide of claim 14.

18 (currently amended). ~~A host cell~~ An isolated host cell comprising the recombinant vector of claim 17.

19 (previously presented). A method for producing a polypeptide, said method comprising:

- a) providing a host cell comprising the recombinant vector of claim 17; and
- b) culturing said host cell under conditions conducive to the expression of said polypeptide.

20 (previously presented). The method of claim 19, further comprising recovering the polypeptide produced by said host cell.

21 (currently amended). The polynucleotide according to claim 14, wherein said polynucleotide has at least 95% nucleotide identity with the polynucleotide of SEQ ID NO:1 and said polynucleotide encodes a polypeptide that binds to the polypeptide g34782 or to CaM-KII.

22 (currently amended). The polynucleotide according to claim 14, wherein said polynucleotide has at least 95% nucleotide identity with the nucleotide sequence of SEQ ID NO:3 and said polynucleotide encodes a polypeptide that binds to the polypeptide g34782 or CaM-KII.

23 (previously presented). The polynucleotide according to claim 14, wherein said polynucleotide encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2.

24-28 (canceled).

29 (currently amended). The polynucleotide according to claim 14, wherein said polynucleotide encodes a polypeptide comprising an amino acid sequence which is at least 95% identical to the amino acid sequence of SEQ ID NO: 2 and binds to the polypeptide g34782 or binds to a calcium/calmodulin-dependent kinase II (CaM-KII).

30-31 (canceled).

32 (previously presented). The polynucleotide according to claim 14, wherein said polynucleotide comprises the nucleotide sequence of SEQ ID NO:1 or the complement thereof.

33 (previously presented). The polynucleotide according to claim 14, wherein said polynucleotide comprises the nucleotide sequence of SEQ ID NO:3 or the complement thereof.

34 (previously presented). The polynucleotide according to claim 29, wherein said polynucleotide is naturally occurring.

35-46 (canceled).

47 (new). The polynucleotide according to claim 14, wherein said polynucleotide hybridizes under stringent conditions to a polynucleotide encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:2.

48 (new). The polynucleotide according to claim 14, wherein said polynucleotide hybridizes under stringent conditions to a polynucleotide encoding a polypeptide comprising an amino acid sequence that: (i) is at least 95% identical to the amino acid sequence of SEQ ID NO:2; and (ii) binds to the polypeptide g34782 or binds to a calcium/calmodulin-dependent kinase II (CaM-KII).

49 (new). The polynucleotide according to claim 14, wherein said polynucleotide hybridizes under stringent conditions to a polynucleotide comprising SEQ ID NO:1 or the complement thereof.

50 (new). The polynucleotide according to claim 14, wherein said polynucleotide hybridizes under stringent conditions to a polynucleotide comprising SEQ ID NO:3 or the complement thereof.

51 (new). The polynucleotide according to claim 14, wherein said polynucleotide hybridizes under stringent conditions to a polynucleotide that: (i) encodes a polypeptide binds to the polypeptide g34782 or binds to a calcium/calmodulin-dependent kinase II (CaM-KII); and (ii) has at least 95% identity to the nucleotide sequence of SEQ ID NO: 1.

52 (new). The polynucleotide according to claim 14, wherein said polynucleotide hybridizes under stringent conditions to a polynucleotide that: (i) encodes a polypeptide binds to the polypeptide g34782 or binds to a calcium/calmodulin-dependent kinase II (CaM-KII); and (ii) has at least 95% identity to the nucleotide sequence of SEQ ID NO: 3.